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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,084	07/09/2004	Maurizio Lazzerini	39248/GM/lp	3617
7590	02/21/2006			
Modiano & Associati Via Meravigli, 16 Milano, 20123 ITALY			EXAMINER CHANG, AUDREY Y	
			ART UNIT 2872	PAPER NUMBER

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/501,084	LAZZERINI, MAURIZIO	
	Examiner	Art Unit	
	Audrey Y. Chang	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Remark*

- This Office Action is in response to applicant's amendment filed on December 14, 2005, which has been entered into the file.
- By this amendment, the applicant has amended claims 14, 16, 20 and 24.
- Claims 14-26 remain pending in this application.

### *Claim Objections*

**1. Claims 14-26 are objected to because of the following informalities:**

(1). The claims are generally *narrative* and indefinite, failing positively state the structural relationships among the various elements.

(2). The **amended** phrase "a layer of holographic material whereon a hologram can be defined" recited in claim 14 is confusing and indefinite since it is not clear what does it mean by "can be defined". Is the hologram there or not there? If the hologram is not defined thereon what is this "holographic material"? The **amended** phrase "holographic material being coupled to said monochrome background layer" recited in claim 14 is confusing and indefinite since it is not clear *what exactly* is the *relationship* between the two, in terms of the phrase "coupled to", are they next to each other? What is considered to be "coupled to"? Does it mean physical coupling or optical coupling? It is also not clear if the adhesive layer *is or is not* part of the security element, since the term "in general" makes the phrase not definitive.

(3). The amended phrase "hologram defined in said holographic layer" recited in claim 16 is confusing since it is not clear what does it mean by defining a hologram. A hologram is either recorded in the layer or not, there is no such thing as "defining" a hologram.

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(4). The amended phrase “aligned in register with an hologram” recited in claim 16 is confusing and indefinite since it is not clear what exactly is referred to “register with”.

(5). Claims 24 and 25 are still confusing and indefinite since it is not clear what are these external metallization layer and the intermediate metallization layer and how are they related to the layers in its based claim. It is not clear the terms “external” and the “intermediate” are reference to what. Also it is not clear what does the phrase “said regions forming, by overlapping said external metallization layer, said chromatically different regions with respect to the background constituted by said intermediate metallization layer” mean. What is being overlapping here? The scopes of the claims are unclear.

**Appropriate correction is required.**

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Curiel (PN. 6,715,797) in view of the patent issued to Heckenkamp et al (PN. 6,337,752).**

Curiel teaches a temper resistant article, which serves as the *security element*, wherein the article comprises a *metal foil or metallized layer* (12, Figures 1 and 2 or 618 in Figures 12-13) that serves as the *background monochrome layer*, a *hologram layer* (60 or 610) having hologram recorded therein being associated with the metal foil layer (12 or 618) and on the metal foil provided with a plurality of *color bands* (60-74) or demetallization regions (620-638) that serve as the regions being *chromatically different* from the background foil and are visually detectable, (please see Figures 1-2, and 12-13 and columns 6-7

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and 12-13). Curiel further teaches that the article is also formed with a *protective layer* (104). It is implicitly true that demetallized regions are chromatically different from metallized regions.

This reference has met all the limitations of the claims. Curiel teaches that the article can be bonded to a document such as a credit card, (please see column 3, lines 47-55) but it does not teach explicitly that the bonding is via an adhesive layer. However using adhesive layer to adhere the security element to the document intended to be protected is rather well known in the art as demonstrated by the teachings of Heckenkamp et al. **Heckenkamp** in the same field of endeavor teaches an adhesive layer (26, Figure 8) is used to attach the security element having a lacquer protective layer (25), with regard to claim 26, to a document (30). It would then have been obvious to one skilled in the art to apply the teachings of Heckenkamp et al to use adhesive layer to adhere the security element to the document for the benefit of enhancing the bonding property. Furthermore, with regard to claim 26, it would have been obvious to one skilled in the art to add a protective lacquer layer between the security element and the adhesive layer for the benefit of further protecting the security element from being damaged when attaching the element to the document via adhesive layer. .

With regard to claims 15, and 18-23, Curiel teaches that the background layer is provided by a metallized layer (618) and demetallized regions (620-638) are formed in the metallized layer to formed a *plurality of metallized layers* (650-670) and *demetallized layers* (620-638). The demetallized layers are chromatically different regions. Curiel teaches that the metallized layers can be formed by *aluminum*, (please see column 13, lines 5). Curiel teaches that the metallized layer has a thickness of about 80 to 120 Angstroms, (please see column 13 and lines 6-7). Although it does not teach explicitly if the first and second metallized layer have either the same or different thickness such modifications are considered to be obvious matters of design choices for the benefit of providing different decorative effects..

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With regard to claims 16-17, Curiel teaches that the a hologram (such as 42-58, for Figures 1-2) are recorded in the hologram layer and the color bands or the chromatically different regions are superimposed on the hologram, (please see column 7, lines 25-39).

Claims 24 and 25 are *completely unclear* for the reasons stated above they can only be examined in the broadest interpretation. One can identify the metallization layers such as 652, 654 etc. as the *intermediate* layers and the metallized layers (650 and 670) as *external* layer. Curiel teaches that different metallic materials can be used to give aesthetics or efficient color contrast, (please see column 17, lines 35-40). It would then have been obvious to one skilled in the art to make the external and intermediate metallized layers with different metallic materials for the benefit of creating different aesthetic effect. The demetallization regions (620 and 638) can be identified as the demetallization regions for the external regions and the demetallization regions (622, 624 etc.) can be identified as demetallization regions for the intermediate regions.

#### ***Response to Arguments***

4. Applicant's arguments filed on December 14, 2005 have been fully considered but they are not persuasive.

Applicant is respectfully noted that the arguments concerning claims 8-11 are not correct since claims 8-11 have already been canceled in the preliminary amendment filed July 9, 2004.

Applicant's arguments concerning claims 12-14 being allowable are completely incorrect since claims 12-13 have been canceled in the preliminary amendment filed don July 9m 2004. Claim 14 has been canceled under Curiel (PN. 6,715,797) and Heckenkamp et al (PN. 6,337,752) references.

Applicant fails to provide any arguments concerning the rejection.

Applicant fails to respond to the rejections set forth in the previous Office Action, the rejections of claims 14-26 therefore stand.

*Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Contact Information*

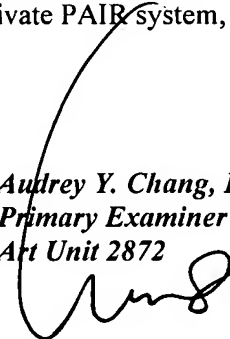
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Audrey Y. Chang, Ph.D.*  
*Primary Examiner*  
*Art Unit 2872*



A. Chang, Ph.D.